



Assessing the usability of a *Willingness to Quit* smoking questionnaire in a sample of active tobacco smokers: A qualitative study

David Onchonga , Haitham Khatatbeh , Martin Thuranira , Kabuga Lennox & Mithil Barath Rajendran Venkatesh

To cite this article: David Onchonga , Haitham Khatatbeh , Martin Thuranira , Kabuga Lennox & Mithil Barath Rajendran Venkatesh (2020): Assessing the usability of a *Willingness to Quit* smoking questionnaire in a sample of active tobacco smokers: A qualitative study, Journal of Addictive Diseases, DOI: [10.1080/10550887.2020.1800891](https://doi.org/10.1080/10550887.2020.1800891)

To link to this article: <https://doi.org/10.1080/10550887.2020.1800891>



Published online: 24 Aug 2020.



Submit your article to this journal [↗](#)




View related articles [↗](#)



View Crossmark data [↗](#)

Assessing the usability of a *Willingness to Quit* smoking questionnaire in a sample of active tobacco smokers: A qualitative study

David Onchonga, MPH^{a,b,*} , Haitham Khatatbeh, MSN^a, Martin Thurania, MD^b, Kabuga Lennox, BSc, Pharm^b and Mithil Barath Rajendran Venkatesh, BSc (Biology)^c

^aDoctoral School of Health Sciences, University of Pécs, Hungary; ^bCounty Department of Health Services Samburu-Kenya; ^cFaculty of Sciences, University of Pécs, Hungary

ABSTRACT

Background and objectives: Tobacco products are conceivably the most accessible addictive substances. Its use contributes to numerous negative health outcomes both in the developed and developing world. The objective of the study was to assess the usability of a *Willingness to Quit* smoking questionnaire; a concise questionnaire used to assess the readiness of active tobacco smokers to stop smoking, and also guiding in constructive conversations between healthcare workers and clients regarding stopping smoking.

Methods: In this study, 25 active tobacco smokers and four healthcare workers of different cadres were interviewed. Participants were given the *Willingness to Quit* smoking questionnaire and asked to fill and comment on its usability, ease of comprehension and plausibility in the healthcare system settings.

Results: All the 25 active tobacco smokers demonstrated their readiness to stop smoking. It was reported that the *Willingness to Quit* smoking questionnaire triggered the intention to stop smoking and effectively guided the interviews between the healthcare workers and clients who had expressed the intention of stopping smoking.

Conclusion: The *Willingness to Quit* smoking questionnaire is a valuable tool in clinical practice as it can be used to prompt tobacco cessation dialogues between healthcare workers and clients attempting to stop smoking.

KEYWORDS

Readiness to stop smoking; tobacco cessation; active tobacco smokers; qualitative study; Kenya

Introduction

Globally, tobacco smoking is an issue of public health interest¹ and as a result, it has continuously become a threat to both consumers and passive-smokers. Some of these threats include illnesses that sometimes turn fatal.² In developing countries and especially in sub-Saharan Africa, it impacts negatively not only the adults but also school going children and youth.³ According to World Health Organization (WHO), about a third of men use tobacco products.⁴ In the United States alone, deaths are three times higher among active cigarette smokers compared to nonsmokers.^{5,6}

Tobacco consumption has greatly increased in the sub-Saharan African countries. At the moment, numerous non-communicable diseases have emerged.⁷ Considering that most of these countries are already struggling economically, tobacco-related health problems continue to

overwhelm them further.⁸ Among youths who start smoking at a young age there is an increased risk of death in their adulthood due to tobacco-related health complications.⁹

In the sub-Saharan Africa, the prevalence of tobacco smoking is highest in Kenya. Annually, there are 8,100 deaths from tobacco related health complications. In the country, an estimated 18,000 young people between the ages of 10–14 and 2,116,000 adults are regular users of tobacco products.¹⁰ In comparison based on gender, about 1,982,100 adult men and 14,300 young boys smoke tobacco. On the other hand, female smokers consist of about 134,400 adult women and 4,200 young girls.¹⁰ Economically, the cost of smoking in Kenya amounts to 2.9 billion Kenya shillings annually. It includes direct costs associated with healthcare overheads, and indirect costs due to decreasing productivity at the workplace as a result of health related complications.¹¹

Reviewed literature reported that barriers to tobacco cessation included the limited number of healthcare professionals involved in tobacco cessation activities, due to limited knowledge and skills about such tobacco interventions.¹² Also, clinician's attitudes toward tobacco cessation, staff smoking, inadequate clinician training in tobacco cessation, concern among clinicians and administrators regarding potential loss of clients, difficulty enforcing tobacco policies, and limited resources to address tobacco use have been cited as potential barriers. Smoking cessation interventions have been noted to be given a lower priority as compared with other clinical interventions and there is a lack of consistent expectations by health care institutions regarding the delivery of tobacco cessation in general.¹³ Similarly, environmental factors have been cited as key barriers to tobacco cessation, including opinions that everyone smokes, easy access to purchasing cigarettes in one's vicinity, and exposure to cigarette advertising. Emphasizing the influence of social context and norms in high-prevalence areas greatly deters the implementation of tobacco cessation programs especially among youths.¹⁴

Cessation of smoking in Kenya has been slow despite the country being a signatory to numerous regional and international treaties and conventions. For instance, the country signed and ratified World Health Organization's Framework Convention on Tobacco Control (WHO-FCTC) in 2004, followed by an enactment of the Tobacco Control Act (TCA) in 2007 by the Kenyan parliament. This intervention aimed to domesticate the FCTC. The TCA gave provisions for: smoking-free public places, graphic health warnings on cigarettes packages, ban on tobacco promotion and sponsorships, tax and price measures, public awareness initiatives, and limiting sales to only the persons above 18 years of age.¹⁵ Smoking cessation efforts are constrained by economic hardships, lack of awareness on the health consequences of tobacco, and poor healthcare systems.¹⁶

The United States Public Health Service (USPHS) in 1996 sponsored Clinical Practice Guidelines on the treatment of tobacco dependence through partnerships between Tobacco Use and Dependence Guideline Panel, Public Health Consortium Representatives, consultants and

staff. The guidelines noted that tobacco dependence is a chronic disease that often requires continuous interventions. Also, suggestively, tobacco misuse could be treated through the implementation of the 5 As approach: A- **Ask** about tobacco, **Advise** users to stop smoking, **Assess** the interest of users to stop smoking, **Assist** in the stopping tobacco smoking attempt, and **Arrange** for follow-up.¹⁷ From literature, more than 70% of tobacco product users visit healthcare facilities at least once annually.

A brief Willingness to Quit smoking questionnaire (WTQ) for use in clinical practice was developed. This is a short questionnaire which is comprised of four short open-ended statements that smokers attempting to stop smoking are given to fill. The statements are: (1). *If I could quit smoking I would....* (2). *I want to quit smoking because I worry about how smoking affects my health....* (3). *I would be willing to decide to quit smoking....* (4). *and I would be willing to cut down my number of cigarettes before quitting....* The WTQ smoking questionnaire assess smoker's present readiness to stop smoking. The questionnaire is equally used to expedite open communication between smokers and clinicians. The questionnaire was developed based on an intensive literature review of patient-reported information to involve active tobacco users in smoking cessation conversations and the tool has been used in developed countries especially in the United States of America where its contents have been validated.¹⁸

Although the questionnaire has been used in developed countries,¹⁹ there are inadequate findings from developing countries. Our intensive literature review did not find any published studies on its usage in the African continent, and therefore assessing its usability will ensure that the items in the questionnaire are appropriate for the intended use and the target population. In that regard, the goal of the study was to assess the usability of the WTQ smoking questionnaire in a sample of active tobacco smokers in Kenya, while the specific objectives were to assess the experience and motivation of active smokers to quit smoking, the readability of the WTQ smoking questionnaire by active smokers, and the perspectives of healthcare providers on the

plausibility of the WTQ smoking questionnaire in routine clinical practice.

Methods

Based on the objectives, an exploratory descriptive research design was used in this study. This methodology has been used for the purposes of understanding the study participant's perspective and experiences in the context of the phenomenon being investigated. In our case, we wanted to investigate the active smoker's experience and motivation to stop smoking and explore their experiences of tobacco smoking cessation methods. Equally, healthcare providers were interviewed to get their comments about the usability and applicability of the instrument in clinical practice. This method has been used by researchers to grasp the phenomenon of interest as they are articulated by the study correspondents.

In this study, 28 active tobacco users and four healthcare workers (medical specialist, medical officer, nursing officer, and a clinical officer) were recruited in the study. Purposive sampling methodology was used.²⁰ This involved identification and selection of individuals or groups of individuals that were competent and knowledgeable with a phenomenon of interest in addition to knowledge and experience and the importance of availability and willingness to participate, and the ability to converse experiences and opinions in a coherent, meaningful and thoughtful manner.²¹ This was done through prescreening of potential study participants by the recruiting research assistant (outpatient nursing officer). The prescreening questions were basically about the knowledge on tobacco cessation, previous history of attempting to quit smoking, and their willingness to participate in the current study.

The office of the director of nursing services managing the Outpatient Department (OPD) in a County referral hospital in Kenya was tasked with recruiting the study participants. This office was involved because about 70% of the smokers visit health facilities and the process of triage starts at the OPD. Therefore, the first point of contact is the nurses manning the triage. The recruitment process involved a brief interaction with patients who came for health services and were willing to quit smoking.

Interviews were discontinued after 25 individual interviews when no new information was being obtained both from the interviews and the analysis of the submission from the last study participant.^{22,23} The inclusion criteria for current smokers was: active adult smokers, above 18 years of age, smoking at least 10 cigarettes per day, had been smoking continuously for at least 24 months, currently not on tobacco cessation treatment, and must have tried to stop smoking at least twice in the last 90 months.

For healthcare workers, inclusion criteria were: being in practice as a clinician and directly handling patients (a Medical Specialist, a Medical Officer, a Clinical Officer and a Nursing Officer) for at least three years, having experience in assisting active tobacco users to stop smoking, and having at least used the questionnaire with three active tobacco users during their routine practice. All the four healthcare workers were from the public health sector.

Study participants were informed of the contents, purpose, and objectives of study before recruitment. Also, they were given a chance to seek clarification or withdraw from the study in case they were not comfortable. Three participants withdrew during recruitment and a final sample of 25 active tobacco smokers consented. Interview guides were used for both participants, audio recorded with their permission, and transcribed verbatim. The individual interviews took between 12 and 21 minutes for both participants. The study received ethical approval from Jaramogi Oginga Odinga Teaching and Referral Ethical Review Committee (ERC.IB/VOL.1/69).

Interviews with active smokers and healthcare providers

The first and third author undertook qualitative interviews with the two sets of respondents using the same approach. First, active smokers were interviewed and the interview was divided into two phases. We used interview guides that were developed from intensive literature review. These were open ended questions that were asked to avoid getting direct responses from the study participants. Questions like; *Tell me about your smoking journey...* were asked. These were

followed by further specific but not direct questions such as the duration of smoking in years, frequency of smoking in a day, quantity of cigarettes smoked in a day, any attempts to quit smoking, reasons for any attempt, and the motivation for current attempt to quit smoking. The first phase was undertaking concept elicitation where open-ended questions were asked about the participant's smoking history, their willingness to quit smoking journey, and factors that could influence their willingness to stop smoking. The second phase was the administration of the WTQ instrument. They were asked to complete the four questions on the instrument and also several discussions on the meaning, relevance, and adequate understanding of each question was investigated. They were equally required to comment on the wording of the instrument, if they understood it well and if not, they were asked to give suggestions on different words to be used to better the tool.

The healthcare providers were equally required to give their observations on the usability of the instrument, especially how best the patients comprehended the instrument. They were also asked to recommend any modifications to the phrasings and identify any content that was not relevant. In concept elicitation, they were asked broad, open-ended questions that were geared to give more insights on their patient's smoking history and their willingness to be assisted to stop smoking. The interview with active smokers took between 38 and 52 minutes and with healthcare providers it took between 18 and 32 minutes.

Data analysis

Miles and Huberman's proposed steps for qualitative data analysis methodology was used.²⁴ This method involves three steps: data reduction, data display, and conclusion drawing/verification. Data were reduced through making summaries, focusing on important aspects, related to usability of WTQ smoking questionnaire. Data which had no direct relation with the theme of the study were discarded. Next, the retained data was organized and used to formulate the research questions for this study. The questions included: the readability of the WTQ smoking

questionnaire by both the healthcare workers and the active smoker, the applicability of the WTQ smoking questionnaire, and the duration taken to use the tool in actual clinical practice. The third step was conclusions drawing and verification of the themes that emerged from the discussions.

The collected data from active smokers and healthcare providers were transcribed and analyzed separately. The analysis was done using the thematic content analysis method to ascertain how concepts and sub-concepts would be coded. The concepts were coded as 'spontaneous elicitation' if the concept was mentioned by the study participant with ease and instantly during the open-ended discussions/interviews. We coded concepts as 'probed' if the investigator asked the study participants about a particular concept that was important but was not mentioned in the open-ended interviews and if they agreed that the concept was appropriate and significant. Finally, we coded 'no impact' if it was not mentioned either in the open-ended discussions/interviews and further probing. Conceptual saturation was evaluated to confirm that the concepts elicited from participants had been fully investigated through the interviews and provided evidence of an adequate sample size. Saturation was contemplated to be attained if no new concepts arose in the final group of interviews.

The audiotaped interviews were initially transcribed by three transcriptionists and appraised by the first author. The second author reviewed 30% of the transcripts of the audiotaped interview for consistency and reliability. Credibility and trustworthiness were further verified by an independent reviewer, who also examined the codes, themes and any disagreements from the three transcriptionists (this was ascertained through crosschecking with the field notes)

Results

Demographic characteristics of study participants

A total of 25 active smokers participated in this study 92% being males ($n = 23$). Also, among the healthcare workers, 75% of participants were male ($n = 3$) as shown in [Table 1](#).

Table 1. Social demographic characteristics of respondents.

CODE	Gender	Location	Age	Marital status	Employment	Level of education	Number of attempts
R1	Male	Rural	20	Single	Not working	College Diploma	3
R2	Male	Rural	23	Single	Working	College Diploma	3
R3	Male	Rural	31	Single	Working	Bachelor Degree	3
R4	Male	Urban	42	Married	Not working	Bachelor Degree	3
R5	Male	Urban	32	Single	Working	Bachelor Degree	3
R6	Male	Urban	38	Single	Not working	Bachelor Degree	3
R7	Male	Urban	45	Married	Working	College Diploma	4
R8	Male	Urban	28	Single	Working	Bachelor Degree	3
R9	Female	Urban	33	Single	Working	Master Degree	3
R10	Male	Rural	21	Single	Not working	College diploma	3
R11	Male	Rural	19	Single	Working	Master degree	3
R12	Male	Rural	45	Married	Working	Master degree	4
R13	Male	Rural	41	Single	Working	College diploma	3
R14	Male	Rural	31	Single	Not working	College diploma	3
R15	Male	Rural	30	Married	Not working	Bachelor degree	3
R16	Male	Urban	39	Married	Not working	Bachelor degree	4
R17	Male	Urban	32	Married	Not working	Bachelor degree	3
R18	Male	Urban	46	Married	Working	Bachelor degree	3
R19	Male	Urban	48	Single	Not working	College diploma	4
R20	Female	Urban	21	Single	Working	College Diploma	5
R21	Male	Urban	23	Single	Working	Master degree	3
R22	Male	Urban	25	Married	Not working	College diploma	3
R23	Male	Urban	28	Single	Working	Master degree	3
R24	Male	Urban	29	Single	Working	College diploma	3
R25	Male	Rural	35	Married	Not working	Bachelor degree	3
Healthcare provider	Gender	Location	Age	Marital status	Years of experience	Cadre	Patients assisted to quit smoking
HCP1	Male	Urban	37	Married	15	Nursing officer	4
HCP2	Female	Urban	34	Married	10	Clinical Officer	6
HCP3	Male	Urban	46	Married	16	Medical Officer	5
HCP4	Male	Urban	48	Married	12	Medical Consultant	7

Concept elicitation from research participants

The first extensive thought dwelled on health influence of tobacco use with the corresponding specific concept settling on inflammation and decreased immune function of the smokers ($n=19$), poor muscle strength making the body of tobacco smokers weak ($n=23$), delayed healing on wounds in case tobacco smokers had injuries ($n=20$), and lack of appetite among the heavy tobacco smokers ($n=24$).

Respondents adequately acknowledged the risk factors of tobacco use during pregnancy. They mentioned the following: expectant women who smoke are likely to have preterm births ($n=23$), give birth to children with low birthweight ($n=21$), they are likely to experience ectopic pregnancies ($n=17$), they are prone to miscarriages ($n=25$), and they are susceptible to still births ($n=23$).

The third extensive concept mentioned was immediate adverse health effects, specifically; compromised immune system of the tobacco smokers ($n=19$), nicotine addiction ($n=24$), and respiratory problems ($n=18$). The other thought was long-term adverse effects on health outcomes, particularly; development of malignant

cancers ($n=25$), cardiovascular diseases ($n=24$), respiratory diseases, ($n=18$), rheumatoid arthritis ($n=20$), increased health cost ($n=18$), and deaths attributed to tobacco use ($n=17$). “Well-being” was another extensive thought. They reported that tobacco smoking reduces stress for smokers ($n=23$), improves their mental state ($n=23$), prevents boredom ($n=21$), and brings relaxation and pleasure to active tobacco smokers ($n=22$) as shown in Table 2.

Healthcare workers

The health workers unanimously gave an overview of the health conditions associated with tobacco use such as lung cancer, cancers of the mouth, pharynx, larynx, esophagus, stomach, pancreas, cervix, kidney, bladder, and myeloid leukemia. Other conditions included bronchitis, chronic obstructive pulmonary diseases, and pneumonia.

Responses on the usability of the WTQ smoking questionnaire in public health facilities

The usability of the WTQ smoking questionnaire was tested in this study. The participants

Table 2. Concept/thoughts saturation analysis.

Concepts/thoughts	Sub-concepts	Participant responses																								
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Impact of smoking on general health	Low immunity	×	√	×	×	–	×	–	×	√	×	×	√	×	×	–	×	–	×	√	×	×	–	×	×	√
	Weakens the body	√	×	×	×	×	–	×	×	×	√	×	×	×	×	×	×	–	×	×	×	×	×	×	×	×
	Delay healing	×	×	–	√	×	×	×	×	×	×	×	×	–	√	×	×	×	×	×	×	√	×	–	×	–
	Teeth problems	–	×	×	√	×	√	×	–	×	×	–	×	×	√	×	√	×	–	×	×	–	×	×	×	×
	Loss of weight	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Health risk to expectant mothers	Loss of appetite	×	×	×	×	×	–	×	×	×	×	×	×	×	×	×	×	–	×	×	×	×	×	×	×	×
	Pre-term births	×	×	√	×	×	×	×	×	×	×	×	×	√	×	×	×	×	×	×	×	×	×	×	×	√
	Low birth weight	√	×	×	√	√	×	×	×	×	×	√	×	×	√	√	×	×	×	×	×	×	√	×	×	×
	Miscarriage	×	×	×	×	×	×	×	×	×	×	×	×	×	×	–	×	×	×	×	×	×	×	×	×	×
Immediate health risks	Risks with neonate	×	√	×	×	×	×	×	×	√	×	×	√	×	×	×	×	×	×	√	×	×	×	×	×	×
	Nicotine addiction	√	×	×	×	×	×	×	×	×	×	√	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Long term health risks and Diseases	Respiratory problems	×	√	×	√	×	√	×	√	×	√	×	√	×	√	×	√	×	√	×	√	×	×	√	–	×
	Cancer	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
	Cardiovascular	×	×	×	×	×	×	×	×	×	×	×	×	×	×	–	×	×	×	×	×	×	√	×	×	×
	rheumatoid arthritis	√	×	×	√	×	×	√	×	×	√	√	×	×	√	×	×	√	×	×	√	×	×	–	×	×
Well-being	Cost of medication	×	–	×	√	×	×	√	×	×	√	×	–	×	√	×	×	√	×	×	√	×	√	–	×	–
	Stress reliever	×	×	×	×	×	×	×	–	×	×	×	×	×	×	×	×	×	×	×	×	×	√	×	×	×
	Improved mental state	×	×	√	×	×	×	×	×	×	×	×	×	×	√	×	×	×	×	×	×	×	×	×	×	×
	Reduction of boredom	×	×	×	–	×	×	√	×	×	√	×	×	×	–	×	×	√	×	×	√	×	×	√	×	×
	Mind relaxation	×	×	×	×	×	×	×	√	×	×	×	×	×	×	×	×	×	√	×	×	×	–	×	–	×

Key: ×- instinctive elicitation.

√/- Explored.

- No effect.

Table 3. Responses from participants supporting WTQ smoking questionnaire.

Instructions: if you are a smoker, please answer these simple questions to help understand your readiness to stop smoking		Responses
s/no	Item	
1.	If I would stop smoking I would	"I want better health". (male, 28 years) "Smoking is not good and therefore if I am able to quit, I will" (female, 30 years)
2.	I want to stop smoking because I worry about how smoking affects my health	"The item is very significant because my health is deteriorating fast with this smoking" (male, 32 years) "As a mother, my health is affected and it is a concern". (female, 39 years) "My health is deteriorating and I need to stop this thing" (male, 51 years)
3.	I would be willing to decide to stop smoking	"Planning is very important because you can't quit immediately". (male, 42 years). "I have made two attempts of quitting smoking but I think I lacked an appropriate plan." (female, 45 years)
4.	I would be willing to cut down my number of cigarettes before stopping	"I will start by reducing the number of cigarettes I smoke per day" (male, 33 years) "I think it's possible to reduce the number of cigarettes" (female, 43 years)

exhibited an excellent grasp of all the questions in the questionnaire. They had the ability to answering all the questions without difficulties. All the participants ($n=25$) provided encouraging views about the questionnaire. Also, they suggested that the instrument should be introduced in all healthcare facilities during clinical consultations to assist those attempting to stop smoking.

Healthcare workers ($n=4$) noted that the questionnaire was plausible with each item being appropriate. They mentioned that the instrument was brief, easy to complete and the users always gave responses that would be used to measure their intention to quit smoking. They also noted that the tool facilitated open communication with clients during clinical appointments and consultations as it does not take much time to fill. There were no changes suggested to the questionnaire either by the healthcare providers or the active

tobacco users who participated in this study. A summary of participants quotes obtained from the questionnaires on WTQ tobacco smoking is given in Table 3.

Discussion

In both the developed and developing world, tobacco smoking remains a public health issue that require strategic interventions. In that regard, any efforts that promote the discussions on tobacco cessation should be supported. The Willingness to Quit smoking questionnaire is among the instruments that have been developed to expedite constructive dialogues between tobacco smokers willing to stop smoking and the healthcare workers during routine clinical practice.

From the thoughts of the respondents, they were knowledgeable of the health conditions

attributed to smoking and this agrees with various studies that have indicated that tobacco smokers are cognizant of the dangers attributed to prolonged smoking although they find it challenging to stop.^{25,26}

This qualitative study endorses the usability of the WTQ smoking questionnaire as a practical tool during routine clinical practice. The study participants agreed that the items in the questionnaire are practical, suitable, concise, easy to comprehend, and strategic in tobacco smoking cessation discussions. This study agrees with other findings done in other parts of the world on the content validity of the WTQ smoking questionnaire.^{18,27}

The plausibility of the questionnaire allows healthcare providers to discuss with active smokers on possible ways of stopping smoking through constructive dialogues. Studies have indicated that where healthcare workers serve many patients due to limited number of staff, there is a need to adopt tools that will reduce the amount of time taken so as to improve client satisfaction in public health facilities.²⁸

The study findings agree with other studies that there are many tobacco users who are willing to be assisted to stop smoking and therefore the available healthcare systems should be cognizant of those needs so as to develop measures that can help in tobacco smoking cessation.^{29,30}

To the best of our knowledge, the tool has not been widely used and therefore the existing literature did not find any evidence that disagrees with the findings of this study or the already existing studies. There is therefore need for more research on the applicability of this tool in diverse settings.

Study limitations

It has been commented that in qualitative research, data collected generally lacks randomization and there is a leeway of bias during elucidation. Due to the small sample size, the research may lack the ability to establish causal associations.

Conclusion

The WTQ smoking questionnaire was noted to be a usable tool and its adoption in routine

clinical practice should be encouraged. Most active tobacco smokers are eager to stop smoking but are unable due to misuse. The healthcare systems should be cognizant of the people who are willing to stop smoking and put adequate measures such as adopting the WTQ smoking questionnaire in routine clinical practice. Equally, strategic approaches such as counseling, medication, and rehabilitation measures should be made available, accessible, and affordable. This will provide an enabling environment for tobacco users who are willing to quit smoking. The questionnaire should be made available in all strata of the healthcare system.

ORCID

David Onchonga  0000-0003-4461-797X

References

1. Mathers CD, Loncar D. Projections of Global Mortality and Burden of Disease from 2002 to 2030. *Samet J. PLoS Med.* 2006;3(11):e442. doi:10.1371/journal.pmed.0030442.
2. Parkin D. Tobacco-attributable cancer burden in the UK in 2010. *nature.com*. 2011. [Accessed September 24, 2019]. <https://www.nature.com/articles/bjc2011475>.
3. Rudatsikira E, Abdo A, Muula AS. Prevalence and determinants of adolescent tobacco smoking in Addis Ababa. Ethiopia. *BMC Public Health.* 2007;7(1):176. doi:10.1186/1471-2458-7-176.
4. WHO. World Health Organization: Smoking Statistics. [Accessed September 24, 2019]. <https://www.who.int/westernpacific>. Published 2018.
5. Carter BD, Abnet CC, Feskanich D, Freedman ND, Hartge P, Lewis CE, Ockene JK, Prentice RL, Speizer FE, Thun MJ, et al. Smoking and mortality-beyond established causes. *N Engl J Med.* 2015;372(7):631–40. doi:10.1056/NEJMsa1407211.
6. Peacock A, Leung J, Larney S, Colledge S, Hickman M, Rehm J, Giovino GA, West R, Hall W, Griffiths P, et al. Global statistics on alcohol, tobacco and illicit drug use: 2017 status report. *Addiction.* 2018;113(10):1905–26. doi:10.1111/add.14234.
7. Jemal A, Thun M, Ries L. Annual report to the nation on the status of cancer, 1975–2005, featuring trends in lung cancer, tobacco use, and tobacco control. *academic.oup.com*. 2008. [Accessed September 24, 2019]. <https://academic.oup.com/jnci/article-abstract/100/23/1672/2581337>.
8. Gajalakshmi C, Jha P. ... KR. Global patterns of smoking and smoking-attributable mortality. *bases.bireme.br*. 2000. [Accessed September 30, 2019]. <http://bases.bireme.br/cgi-bin/wxislind.exe/iah/online/>

- ?IsisScript=iah/iah.xis&src=google&base=REPIDISCA &lang=p&nextAction=lnk&exprSearch=34615&index Search=ID.
9. Townsend L, Flisher A, Gilreath T. A systematic literature review of tobacco use among adults 15 years and older in sub-Saharan Africa. Elsevier. 2006. [Accessed September 25, 2019]. <https://www.science-direct.com/science/article/pii/S0376871605004023>.
 10. American Cancer Society. Kenya – Tobacco Atlas. 2018.
 11. Tobacco Free Kids. New Survey Shows Need for Kenya to Take Strong Action to Save Lives from Tobacco Use.
 12. Sarna L, Wewers ME, Brown JK, Lillington L, Brecht ML. Barriers to tobacco cessation in clinical practice: Report from a national survey of oncology nurses. *Nurs Outlook*. 2001;49(4):166–72. doi:10.1067/mno.2001.115448.
 13. Pagano A, Tajima B, Guydish J. Barriers and facilitators to tobacco cessation in a nationwide sample of addiction treatment programs. *J Subst Abuse Treat*. 2016;67:22–9. doi:10.1016/j.jsat.2016.04.004.
 14. Rosenthal L, Carroll-Scott A, Earnshaw VA, Sackey N, O'Malley SS, Santilli A, Ickovics JR. Targeting cessation: Understanding barriers and motivations to quitting among urban adult daily tobacco smokers. *Addict Behav*. 2013;38(3):1639–42. doi:10.1016/j.addbeh.2012.09.016.
 15. Tobacco Tactics. Smoking in Kenya- Country Profile. 2018.
 16. Abdullah ASM, Husten CG. Promotion of smoking cessation in developing countries: a framework for urgent public health interventions. *Thorax*. 2004;59(7):623–30. doi:10.1136/thx.2003.018820.
 17. West R, McNeill A, Raw M. Smoking cessation guidelines for health professionals: an update. Health Education Authority. *Thorax*. 2000;55(12):987–99. doi:10.1136/thorax.55.12.987.
 18. Baker CL, Bruno M, Grant L, Johnson C, Bennett B, Brohan E, Emir B. Content Validity of a Willingness to Quit Tool for Use with Current Smokers in Clinical Practice. *Adv Ther*. 2017;34(10):2295–306. doi:10.1007/s12325-017-0611-y.
 19. Fed Regist. US Food and Drug Administration. Guidance for industry: patient-reported outcome measures: use in medical product development to support labeling claims. 2009.
 20. Cresswell JW, Plano Clark VL. Designing and Conducting mixed method research. Thousand Oaks, CA: SAGE; 2011.
 21. Bernard HR. Research Methods in Anthropology: Qualitative and Quantitative Approaches. Lanham, MD: AltaMira Press; 2002. p. 3
 22. Hennink MM, Kaiser BN, Marconi VC. Code Saturation Versus Meaning Saturation: How Many Interviews Are Enough? *Qual Health Res*. 2017;27(4):591–608. doi:10.1177/1049732316665344.
 23. Saunders B, Sim J, Kingstone T, Baker S, Waterfield J, Bartlam B, Burroughs H, Jinks C. Saturation in qualitative research: exploring its conceptualization and operationalization. *Qual Quant*. 2018;52(4):1893–907. doi:10.1007/s11135-017-0574-8.
 24. Miles MB, Huberman AM. Qualitative data analysis. 2nd ed. London: SAGE; 1994.
 25. Winickoff JP, Friebely J, Tanski SE, Sherrod C, Matt GE, Hovell MF, McMillen RC. Beliefs about the health effects of “thirdhand” smoke and home smoking bans. *Am Acad Pediatr*. 2009;123(1):e74–e79. [Accessed May 11, 2020]. <https://pediatrics.aappublications.org/content/123/1/e74.short>. doi:10.1542/peds.2008-2184.
 26. Brownson RC, Jackson-Thompson J, Wilkerson JC, Davis JR, Owens NW, Fisher EB. Demographic and socioeconomic differences in beliefs about the health effects of smoking. *Am J Public Health*. 1992;82(1):99–103. doi:10.2105/AJPH.82.1.99.
 27. McBride CM, Emmons KM, Lipkus I. Understanding the potential of teachable moments: the case of smoking cessation. *Health Educ Res*. 2003;18(2):156–70. doi:10.1093/her/18.2.156.
 28. Geberu DM, Biks GA, Gebremedhin T. Factors of patient satisfaction in adult outpatient departments of private wing and regular services in public hospitals of Addis Ababa, Ethiopia: a comparative cross-sectional study. *BMC Heal Serv*. 2019;19: 869 doi:10.1186/s12913-019-4685-x.
 29. Jha P, C F, Curbing the epidemic: governments and the economics of tobacco control. *ncbi.nlm.nih.gov*. 1999. [Accessed September 30, 2019]. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1759728/>.
 30. WHO. Framework Convention on Tobacco Control. [Accessed September 30, 2019]. <https://scholar.google.com/scholar?hl=en&q=Framework+Convention+on+Tobacco+Control.+Geneva%2C+Switzerland%3A+World+Health+Organization%3B+2003>. Published 2016.